

## REMARKS

Favorable reconsideration in view of the previous amendments and following remarks is respectfully requested.

Claims 2-8, 15, 16, 18-35, 40 and 41 are pending. By this Amendment claims 1, 9-14, 17 and 36-39 are canceled, claims 2-6, 15, 16, 18, 19, 21-23, 25, 27, 28, 34 and 35 are amended, and new claims 40 and 41 are added. No new matter has been added.

The Office Action objects to the specification because the terms "screw bridge" and "screw bottom" are not mentioned in the specification. The claims are amended to clarify that these terms refer to the screw thread and the screw base, respectively. Withdrawal of the objection to the specification is respectfully requested.

The Office Action indicated that the Applicants are required to furnish drawings. In accordance with the requirement, Figs. 1 and 2 are attached hereto.

The Office Action rejects claims 1 through 39 under 35 U.S.C. § 112, second paragraph. The claim terms and other issues raised in the rejection are addressed in the amendments to the claims.

The Office Action rejects claims 1, 4-9 and 12-39 under 35 U.S.C. § 112, first paragraph. Claims 1 and 9 are canceled and replaced with new claim 40 to address the Examiner's concerns.

The Office Action rejects claims 1-25 and 35 under 35 U.S.C. § 102(b) over U.S. Patent No. 5,951,940 to *Nosker et al.*; rejects claims 1, 22, 23, 26, 28-30, 33 and 34 under 35 U.S.C. § 102(b) over U.S. Patent No. 5,895,809 to *Wagner et al.*; rejects claims 2, 3, 10, 11 and 23 under 35 U.S.C. § 103(a) over *Nosker* in view of

Applicants' disclosed prior art; and rejects claims 22, 23 and 29-32 under 35 U.S.C. § 103(a) over *Wagner* alone or in view of Applicants' disclosed prior art. These rejections are respectfully traversed.

New independent claim 40 recites a method for continuous preparation of a product comprising supplying the product to a multi-shaft extruder and rotating at least four individually driven, self-cleaning screw shanks of the multi-shaft extruder in a common direction about their own axes. Each screw shank is arranged in respective single bore holes, and each screw shank has a smooth surface, an outer diameter  $D_a$  at a screw thread, and an inner diameter  $D_i$  at a screw base. A process space is formed having a lateral area  $A_m$  including bore hole surfaces and a free volume  $V_f$  formed between the screws and the bore hole surfaces. At least a portion of the process space has a ratio  $A_m^3/V_f^2$  between 1020 and 3050 for two flighted screw elements at a  $D_a/D_i$  ratio of 1.3 to 1.7.

Such a feature encompasses Applicants' exemplary embodiment as illustrated in new Fig. 2 wherein screw shanks 3 rotate about their own axes and are each arranged in respective single bore holes. The process space has a lateral area  $A_m$  formed by smooth bore hole surfaces and a free volume  $V_f$  formed between the screws and the bore hole surfaces.

The *Nosker* patent does not disclose self-cleaning screws that rotate in the same direction. Nor does the *Nosker* patent disclose either screw shanks nor bore holes that have smooth surfaces. The *Nosker* patent also does not disclose a ratio of an outer diameter  $D_a$  at the screw thread to an inner diameter  $D_i$  at the screw base of 1.3 to 1.7. The *Wagner* patent does not disclose completely self-cleaning

screws that rotate in the same direction, nor does the *Wagner* patent disclose a screw shank or a bore hole having a smooth surface.

The dependent claims are allowable for at least the reasons discussed above, as well as for the individual features they recite. For example, dependent claim 6 recites wherein the product to be processed is a polycondensate that is at least one of contaminated and moist. Neither the *Nosker* nor the *Wagner* patents disclose this feature.

Early and favorable action with respect to this application is respectfully requested.

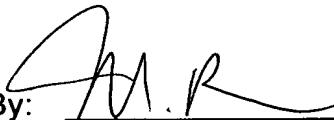
Should the Examiner have any questions regarding this amendment or the application in general, he is invited to contact the undersigned at the number provided below

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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